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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,802	08/28/2003	Won Hee Lee	P24098	5606
7055	7590	12/23/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			JIANG, CHEN WEN	
			ART UNIT	PAPER NUMBER
			3744	

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/649,802	Applicant(s) LEE ET AL.	
	Examiner Chen-Wen Jiang	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,7,9,10,13 and 15-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 6,7,9,10,13 and 15-70 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiner's Comment

1. The amendments and remarks presented by the applicant have been duly noted and reviewed. The allowable subject matter states the claims "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims". Applicants not only don't have all of the limitations of the base claim and any intervening claims but also change the limitations. The restriction of the amended claims is required.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 9,49 and 50, drawn to regenerate heat exchanger air directive arrangement, classified in class 62, subclass 406.
 - II. Claims 15-18, drawn to first and second heat exchangers arrangement, classified in class 62, subclass 259.1.
 - III. Claims 19-23, drawn to condensate draining, classified in class 62, subclass 288.
 - IV. Claims 25-26, drawn to air-conditioning third air inlet arrangement, classified in class 62, subclass 427.
 - V. Claims 27-29 and 51-54, drawn to cover means, classified in class 454, subclass 275.
 - VI. Claims 30-39 and 55-61, drawn to heat exchanger mounting/dismounting, classified in class 62, subclass 259.4.
 - VII. Claims 40-48 and 62-70, drawn to heat exchanger assembly, classified in class 165, subclass 72.

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VIII. Claim 10, drawn to air-conditioning louvers, classified in class 454, subclass 309.

IX. Claim 13, regenerative heat exchanger assembly, classified in class 165, subclass 164.

3. Inventions I-IX are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, the invention in Group I has separate utility such as in the system does not have the heat exchangers arrangement of Group II, drain channel of Group III, third inlet arrangement of Group IV, opening/closing device of Group V, mounting/dismounting device of Group VI, jig cover of Group VII, louvers of Group VIII nor the plate regenerative heat exchanger of Group IX. The invention in Group II has separate utility such as in the system does not have the inflow pattern of Group I, drain channel of Group III, third inlet arrangement of Group IV, opening/closing device of Group V, mounting/dismounting device of Group VI, jig cover of Group VII, louvers of Group VIII nor the plate regenerative heat exchanger of Group IX. The invention in Group III has separate utility such as in the system does not have the inflow pattern of Group I, heat exchangers arrangement of Group II, third inlet arrangement of Group IV, opening/closing device of Group V, mounting/dismounting device of Group VI, jig cover of Group VII, louvers of Group VIII nor the plate regenerative heat exchanger of Group IX. The invention in Group IV has separate utility such as in the system does not have the inflow pattern of Group I, heat exchangers arrangement of Group II, drain channel of Group III, opening/closing device of Group V, mounting/dismounting device of Group VI, jig cover of Group VII, louvers of Group VIII nor the plate regenerative heat exchanger of Group IX. The invention in Group V has separate utility such as in the system does not have the inflow pattern

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of Group I, heat exchangers arrangement of Group II, drain channel of Group III, third inlet arrangement of Group IV, mounting/dismounting device of Group VI, jig cover of Group VII, louvers of Group VIII nor the plate regenerative heat exchanger of Group IX. The invention in Group VI has separate utility such as in the system does not have the inflow pattern of Group I, heat exchangers arrangement of Group II, drain channel of Group III, third inlet arrangement of Group IV, opening/closing device of Group V, jig cover of Group VII, louvers of Group VIII nor the plate regenerative heat exchanger of Group IX. The invention in Group VII has separate utility such as in the system does not have the inflow pattern of Group I, heat exchangers arrangement of Group II, drain channel of Group III, third inlet arrangement of Group IV, opening/closing device of Group V, mounting/dismounting device of Group VI, louvers of Group VIII nor the plate regenerative heat exchanger of Group IX. The invention in Group VIII has separate utility such as in the system does not have the inflow pattern of Group I, heat exchangers arrangement of Group II, drain channel of Group III, third inlet arrangement of Group IV, opening/closing device of Group V, mounting/dismounting device of Group VI, jig cover of Group VII nor the plate regenerative heat exchanger of Group IX. The invention in Group IX has separate utility such as in the system does not have the inflow pattern of Group I, heat exchangers arrangement of Group II, drain channel of Group III, third inlet arrangement of Group IV, opening/closing device of Group V, mounting/dismounting device of Group VI, jig cover of Group VII nor the louvers of Group VIII. See MPEP § 806.05(d).

4. If Group IV or V is elected, then claim 24 will be examined with the elected Group. Claims 6 and 7 will be examined with any elected Group.

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5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and the search for each group is not required for the other groups, restriction for examination purposes as indicated is proper.

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809.

The examiner can normally be reached on Tuesday-Friday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (571) 272-4808. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang
Primary Examiner

A handwritten signature in black ink, appearing to be 'C. W. Jiang', written in a cursive style.